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Date

JUN 17 2002

Signature

Marilyn B. McKeon

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Ratnam SOORIYAKUMARAN et al.

Serial No.: 10/079,289

Group Art Unit: 1652

Filing Date: February 19, 2002

Examiner: Unassigned

Title: SUBSTANTIALLY TRANSPARENT AQUEOUS BASE SOLUBLE POLYMER SYSTEM FOR USE IN 157 NM RESIST APPLICATIONS

**DECLARATION OF RATNAM SOORIYAKUMARAN, ROBERT DAVID ALLEN,
AND DEBRA FENZEL-ALEXANDER**

Commissioner for Patents
Washington, D.C. 20231

Sir:

We, Ratnam Sooriyakumaran, Robert David Allen, and Debra Fenzel-Alexander, hereby declare as follows:

1. We are the inventors of the subject matter claimed in U.S. Patent Application Serial No. 10/079,289, entitled "SUBSTANTIALLY TRANSPARENT AQUEOUS BASE SOLUBLE POLYMER SYSTEM FOR USE IN 157 NM RESIST APPLICATIONS," filed February 19, 2002 as a continuation-in-part (C-I-P) of U.S. Patent Application Serial No. 09/748,071, filed December 21, 2000. Both the '289 application and the '071 application are assigned to International Business Machines Corporation.

2. We are also co-authors on two publications submitted to the U.S. PTO in the Information Disclosure Statement filed with the '289 application, "Silicon-Containing Resists for 157 nm Applications," *SPIE's 26th Annual International Symposium and Education Program on Microlithography* (abstract 4345-35, Session 8) (February 26, 2001), and "Silicon-Containing Resists for 157 nm Applications," *Proceedings of SPIE - Advances in Resist Technology and Processing XVIII* 4345: 319-326 (February 26, 2001), by Ratnam Sooriyakumaran, Debra Fenzel-Alexander, Nicolette Fender, Gregory M. Wallraff, and Robert D. Allen.

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3. With regard to the authorship on the aforementioned publications, our co-authors, Nicolette Fender and Gregory Wallraff, were working according to our instructions. Specifically, Dr. Fender measured the optical absorption at 157nm of many of our polymers and resist formulations, using a Varian Cary 400 Spectrophotometer, while Dr. Wallraff supervised her work. Neither Dr. Fender nor Dr. Wallraff contributed to the conception of the invention claimed in the present patent application.

4. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

IN THE TESTIMONY WHEREOF we have hereunto set our signatures on the date(s) indicated below.

Ratnam SOORIYAKUMARAN et al.

Ratnam Sooriyakumar

Date: 5/20/02

Debra FENZEL-ALEXANDER

Debra Fenzel Alexander

Date: 5/29/02

Robert David ALLEN

Robert David Allen

Date: 5/20/02